

REMARKS

In the Office Action, the Examiner rejected claims 1-29. By the present Response, Applicants have amended claim 20 and cancelled claim 25 without prejudice. Upon entry of the amendments, claims 1-24 and 26-29 will remain pending in the present application. In view of the foregoing amendments and the following remarks, Applicants respectfully request reconsideration and allowance of all pending claims.

Objections to the Drawings

In the Office Action, the Examiner objected to the drawings under 37 C.F.R. § 1.83(a) for failing to “show every feature of the invention specified in claims [sic] 25.” Office Action mailed December 16, 2004, p. 2. Applicants do not agree with the Examiner’s assertions. Nonetheless, Applicants have canceled claim 25 without prejudice by the present Response. In view of this amendment, Applicants respectfully assert that the objection to the drawings is no longer germane to the present application, and Applicants respectfully request that this objection be withdrawn.

Rejections Under 35 U.S.C. § 112

In the Office Action, the Examiner rejected claim 20 under 35 U.S.C. § 112, first paragraph, for failing to comply with the enablement requirement. Specifically, the Examiner stated as follows:

In claim 20, it is not clear how “a member disposed relative to the antenna to establish the defined load on the antenna[”] works from the specification. It appears from the illustration that the metal of the housing disposed over the antenna to establish [sic] the defined load on the antenna. This description deems [sic] to conform with the depiction shown in Fig. 8.

Applicant is encouraged to implement this type of language in the interest of improving it’s [sic] clarity.

Office Action mailed December 16, 2004, p. 3.

Applicants respectfully traverse this rejection, because the Examiner has failed to sufficiently establish that claim 20 is not enabled and because claim 20 is, in fact, enabled. The Federal Circuit has consistently held that the “PTO bears the initial burden of setting forth a reasonable explanation as to why it believes that the scope of protection provided by that claim is not adequately enabled by the description of the invention provide in the specification of the application.” *In re Wright*, 27 U.S.P.Q. 2d 1510, 1513 (Fed. Cir. 1993). Moreover, the M.P.E.P. requires that a rejection for non-enablement should articulate and support “factors, reasons, and evidence that lead the examiner to conclude that the specification fails to teach how to make and use the claimed invention without undue experimentation, or that the scope of any enablement provided to one skilled in the art is not commensurate with the scope of protection sought by the claims.” M.P.E.P § 2164.04 (emphasis in original).

Furthermore, the Federal Circuit has repeatedly addressed the issue of sufficiency of disclosure, and that Court’s precedent controls in these issues. The standard for determining whether the specification meets the enablement requirement was cast in the Supreme Court decision of *Mineral Separation v. Hyde*, 242 U.S. 261, 270 (1916) in terms of the degree of experimentation needed to practice the claimed invention, and whether this degree of experimentation is undue or unreasonable. The Federal Circuit continues to employ this same standard. *In re Wands*, 8 U.S.P.Q.2d 1400, 1404 (Fed. Cir. 1998). A patent need not teach, and preferably omits, what is well known in the art. *In re Buchner*, 18 U.S.P.Q.2d 1331, 1332 (Fed. Cir. 1991). Moreover, it has long been settled that so long as the specification discloses at least one method for making and using the claimed invention that bears a reasonable correlation to the entire scope of the claims, the enablement requirement under 35 U.S.C. § 112 is satisfied. *In re Fisher*, 166 U.S.P.Q. 18, 24 (CCPA 1970).

Additionally, although the Examiner may take exception to the terms used in the claims, he is reminded that the patentee may be his own lexicographer. *Ellipse Corp. v.*

Ford Motor Co., 171 U.S.P.Q. 513 (7th Cir. 1971), *aff'd*, 613 F.2d 775 (7th Cir. 1979), *cert. denied*, 446 U.S. 939 (1980). Thus, Applicants respectfully assert that a claim cannot be deemed non-enabling simply because the Examiner does not agree with Applicants' choice of claim terminology. Rather, the inquiry that must be conducted is "whether the specification disclosure as a whole is such as to enable one skilled in the art to make and use the claimed invention." *In re Moore and Janoski*, 169 U.S.P.Q. 236, 239 (C.C.P.A. 1971).

With respect to the current rejection, Applicants respectfully assert that the Examiner has failed to establish how the presently claimed subject matter is not enabled. Respectfully, Applicants assert that the Examiner's conclusory statement that "it is not clear how 'a member disposed relative to the antenna to establish the defined load on the antenna['] works from the specification" is not sufficient to support, let alone demonstrate, why the claimed subject matter of claim 20 is not enabled. In fact, the Examiner's contention that the claimed subject matter seems "to conform with the depiction shown in Fig. 8" evidences that the Examiner believes that the present application provides at least one example for making and using the claimed subject matter. Thus, given that this at least one example is provided, claim 20 must be enabled.

To assist the Examiner in examination of the present application and as evidence of enablement of the present claim, Applicants provide the following summary of various sections of the present application. The present application explains that the effect that electrical components have on an antenna is known as loading. *See* Application, ¶ [0004]. Typically, there is some amount of loading on the antenna when the antenna is tuned to produce a maximum output. *See id.* In accordance with embodiments of the claimed invention, by shielding an antenna from external components, the external components have no substantial effect on the loading of the antenna of the radio module, for example. *See id.* at ¶ [0016]. By way of example, the radio module may include an antenna housing 32 that is adapted to define the amount of loading on the antenna so that

the antenna 30 is not loaded by various components 33. In one embodiment, the antenna housing is fabricated of a conductively-coated plastic foam that isolates the antenna electromagnetically from the components within the desktop computer 14 external to the radio module, thereby shielding the antenna 30 from undesirable noise produced by the components within the desktop computer 14. *See id.* at ¶ [0020].

In view of the foregoing, Applicants respectfully assert that claim 20 is enabled and in condition for allowance. Respectfully, Applicants request reconsideration and allowance of claim 20 and, furthermore, request withdrawal of the rejection of claim 20 under Section 112, first paragraph.

Rejections Under 35 U.S.C. § 102

In the Office Action, the Examiner rejected claims 1-24 and 26-29 under Section 102 as anticipated by the Kunert reference (U.S. Patent No. 5,682,299; hereinafter “Kunert”), the Wagner et al. reference (U.S. Patent Application No. 2003/0125070; hereinafter “Wagner”), or the Forrester et al. reference (U.S. Patent No. 6,801,170; hereinafter “Forrester”). As discussed in turn below, Applicants respectfully traverse the Examiner’s rejections, because the Examiner has failed to present a *prima facie* case of anticipation with respect to each of these references.

Anticipation under Section 102 can be found only if a single reference shows exactly what is claimed. *See Titanium Metals Corp. v. Banner*, 227 U.S.P.Q. 773 (Fed. Cir. 1985). For a prior art reference to anticipate under Section 102, every element of the claimed invention must be identically shown in a single reference. *See In re Bond*, 15 U.S.P.Q.2d 1566 (Fed. Cir. 1990). Moreover, the prior art reference also must show the identical invention “in as complete detail as contained in the ... claim” to support a *prima facie* case of anticipation. *Richardson v. Suzuki Motor Co.*, 9 U.S.P.Q. 2d 1913, 1920 (Fed. Cir. 1989) (emphasis added). Accordingly, Applicants need only point to a single element not found in the cited reference to demonstrate that the cited reference fails to

anticipate the claimed subject matter. Additionally, for anticipation, the cited reference must not only disclose all of the recited features but must also disclose the part-to-part relationships between these features. See *Lindermann Maschinenfabrik GMBH v. American Hoist & Derrick*, 221 U.S.P.Q. 481, 486 (Fed. Cir. 1984). With the foregoing in mind, Applicants respectfully assert that all of the pending claims are not anticipated by either Kunert, Wagner, or Forrester, and, as such, are patentable and in condition for allowance.

First Rejection Under Section 102

In the Office Action, the Examiner rejected claims 1-19 as anticipated by the Kunert. In rejecting independent claims 1 and 12, the Examiner stated as follows:

Regarding claim 1, Kunert disclose a radio module for an electrical device, comprising:

a radio transceiver (10) (Fig. 1);
an antenna (30) electrically coupled to the radio transceiver (10) (Fig. 1); and
a shield (12) disposed relative to the antenna to isolate the antenna from loading effects of components of the electrical device (Fig. 1) (Col. 5, Line 4).

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Regarding claim 12, Kunert disclose a radio module, comprising:

a printed circuit board (16) (Fig. 1);
an antenna (30) disposed on the printed circuit board (16) (Fig. 1); and
an electromagnetic shield (12) extending from the printed circuit board (16) around the antenna (Fig. 3).

Office Action mailed December 16, 2004, pp. 3-5 (emphasis added).

Applicants, however, respectfully disagree with the Examiner's contentions and respectfully assert that Kunert fails to disclose all of the features recited in independent claims 1 and 12.

For example, Kunert fails to disclose “a shield disposed relative to the antenna to isolate the antenna from loading effects of components of the electrical device” as recited in claim 1 and “an electromagnetic shield extending from the printed circuit board around the antenna” as recited in claim 12. (Emphases added.) Rather, Kunert discloses an assembly in which any antenna would extend uncovered beyond the housing 12 and, as such, be exposed to loading effects. The Kunert device is PCMCIA module 10 that can be configured as a radio transceiver. *See* Kunert, col. 4, ll. 24-25. If configured as a transceiver, the Kunert device would include an “antenna connector 30 and alternate antenna clips 32 for connection to an antenna.” *See id.* at col. 4, ll. 25-27 (emphasis added). Thus, in contrast to the Examiner’s assertions, Kunert makes clear that element 30 is not an antenna, but instead is a connector to which an antenna is attached. Indeed, as illustrated in Fig. 1 of Kunert, the antenna connector 30 includes an aperture into which an antenna is placed. *See id.* at Fig. 1. Thus, when an antenna is secured to the antenna connector 30 of Kunert, it would extend beyond and externally with respect to the tin top cover 12. This externally located and exposed assembly of the antenna of Kunert demonstrates that no shield extends around the antenna and that no shield isolates the antenna from loading effects from components of the electronic device in which this antenna is utilized. Accordingly, in contrast to the Examiner’s assertions, Applicants respectfully assert that Kunert fails to disclose the antenna assembly as recited in independent claims 1 and 12.

Therefore, Applicants respectfully assert that Kunert fails to anticipate independent claim 1 and its respective dependent claims 2-11 and independent claim 12 and its respective dependent claims 13-19. With the foregoing in mind, Applicants respectfully request reconsideration and allowance of claims 1-19.

Second Rejection Under Section 102

In the Office Action, the Examiner rejected claims 20-26 under 35 U.S.C. § 102(e) as anticipated by Wagner. In rejecting claim 20, the Examiner stated that:

Regarding claim 20, Wagner et al disclose a system, comprising:
a plurality of electrical devices (Fig. 3); and
a plurality of radio modules (20) disposed within the plurality of electrical devices to enable the plurality of electrical devices to communicate wirelessly (Fig. 3), wherein each of the plurality of radio modules comprises an antenna (52) adapted to provide a maximum output at a defined load (Page 2, Col. b, Line 47), and a member (34) disposed relative to the antenna (26) to establish the defined load on the antenna independent of components disposed within the electrical device in which the antenna is disposed (Page 2, Col. b, Line 6).

Office Action mailed December 14, 2004, p. 6.

Applicants, however, respectfully assert that amended independent claim 20 recites features not found in Wagner. For example, Wagner does not disclose an antenna “disposed within the electrical device,” as recited in amended independent claim 20. (Emphasis added.) Rather, in the Wagner device, the antenna module 52 is disposed externally with respect to the device which it is coupled. In Wagner, the antenna modules 52 are attached to the rear surface 50 of the display 48. *See* Wagner, ¶ [0023]. Specifically, the antenna module 52 of Wagner is disposed externally within cavities formed in the casing of the display and not inside the computer system 46. *See id.* Thus, as is best illustrated in FIG. 4 of Wagner, the antenna modules 52 are disposed externally with respect to the remainder of the notebook computer system 46. Accordingly, Wagner does not disclose an antenna that is disposed within the electrical device, as is recited in amended claim 20.

Therefore, Applicants respectfully assert that Wagner does not anticipate independent claim 20 and its respective dependent claims 21-24. With the foregoing in mind, Applicants respectfully request reconsideration and allowance of claims 20-24.

Third Rejection Under Section 102

In the Office Action, the Examiner rejected claims 27-29 under 35 U.S.C. § 102(e) as anticipated by Forrester. In rejecting independent claim 27, the Examiner stated that:

Regarding claim 27, Forrester et al disclose a method of manufacturing a radio module for use within an electrical device, comprising:
tuning an antenna to produce a maximum output at a defined load (Col. 6, Line 34); and
disposing a shield relative to the antenna to establish the defined load on the antenna independent of influences external to the antenna within the electrical device (Col. 7, Line 25).

Office Action mailed December 16, 2004.

Applicants, however, respectfully assert that independent claim 27 recites features not disclosed by Forrester. For example, Forrester does not disclose “disposing a shield relative to the antenna to establish the defined load on the antenna independent of influences external to the antenna within the electrical device,” as is recited in claim 27. Rather, Forrester merely discloses that the wireless device 100 includes a shield 120 that allegedly isolates antenna 110 from second antenna 130, and gives no mention of isolation with respect to the remaining components of the device 100. *See* Forrester, col. 7, ll. 23-27. Keeping in mind that the Examiner bears the burden of establishing a *prima facie* case of anticipation, Applicants respectfully assert that the mere fact that antennae 110 and 130 of Forrester are isolated from one another by the shield 120 is not sufficient to establish that this shield 120 affects antennae 130 or 110 with respect to other components of the device 100. For example, Forrester discloses that the wireless communication device 100 includes various electrical components and circuitry 320 that are disposed on printed circuit board 310. *See id.* at col. 5, ll. 1-3; col. 5, ll. 33-37. Nothing in Forrester suggest that antennae 110 and 130 are isolated from these components and circuits 320 by shield 120. In summary, Applicants respectfully assert

that the Examiner's interpretation of Forrester is not supported by the disclosure of Forrester.

Therefore, Applicants respectfully assert that Forrester does not anticipate independent claim 27 and its respective dependent claims 28-29. With the foregoing in mind, Applicants respectfully request reconsideration and allowance of claims 27-29.

Conclusion

In view of the remarks and amendments set forth above, Applicants respectfully request allowance of the pending claims. If the Examiner believes that a telephonic interview will help speed this application toward issuance, the Examiner is invited to contact the undersigned at the telephone number listed below.

Respectfully submitted,

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